

## UNIT 1

### Communication

#### **Recommended Prior Knowledge**

Students will require a basic knowledge of the internet and e-mail systems, from the theory Unit 4 (Networks). It is important that students understand the importance of security on computer systems. In preparation for this module you could cover the following topics handling passwords to gain access to the operating system, applications software and data. Students will also require a basic knowledge of file management techniques including:

- creating, renaming, deleting and accessing directories/folders
- browsing a directory or folder
- creation of different file types

#### **Context**

This unit can be studied on its own or in conjunction with other practical units. It is recommended that theory Unit 4 (networks) is studied before or in conjunction with this unit. It is also recommended that the practical skills of sending and receiving e-mail messages and file attachments are used for reinforcement in subsequent units. Likewise, further internet searching can also be incorporated into other modules.

#### **Outline**

This unit covers the following areas:

The use of e-mail to:

- receive messages
- send messages using facilities such as reply, forward, copies, create new messages
- receive files as attachments and save them
- send files as attachments

The use of the Internet to:

- locate information on a specified website
- search for information using a search engine
- download and save information

Section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
1.1	Read e-mail	<p>Introduce the language specific to communication, including mail box, address book, address line, carbon copy, blind carbon copy, address, send, reply, forward, file attachments, browser, URL, search engine.</p> <p>Teacher sends some starter e-mails to the students for them to read and later respond to.</p>	<p>Host system for e-mail messages, which could be internal to the centre or globally known hosts like:  <a href="http://www.hotmail.com">http://www.hotmail.com</a>  <a href="http://www.yahoo.com">http://www.yahoo.com</a></p> <p><b>Exercise 1</b></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• set up e-mail addresses</li> <li>• prepare e-mail message to be sent to the students</li> <li>• check the connection to e-mail host system</li> <li>• provide instructions showing what the students have to do.</li> </ul>
1.2	Send e-mail	<p>Teach students how to respond to e-mails. Include typical e-mail netiquette and salutations. Explain how e-mail communication differs from sending written mail.</p> <p>Activities need to include:</p> <ul style="list-style-type: none"> <li>• sending a new message</li> <li>• replying to a message</li> <li>• using the correct address</li> <li>• using a specified subject line for the message</li> <li>• forwarding a message to other recipient/s</li> <li>• copying a message to other recipients either as a carbon copy or as a blind carbon copy.</li> </ul>	<p>Host system for e-mail messages, which could be internal to the centre or globally known hosts like:  <a href="http://www.hotmail.com">http://www.hotmail.com</a>  <a href="http://www.yahoo.com">http://www.yahoo.com</a></p> <p><b>Exercise 2</b></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• set up e-mail addresses</li> <li>• prepare e-mail message to be sent to the students</li> <li>• provide instructions showing what the students have to do.</li> </ul>

Section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
1.3	Send a file	<p>Send a file to another ICT user electronically.</p> <p>Candidates need to learn and to practise locating files from a variety of sources including saving attachments to e-mail messages, finding and saving files from specified internet sites. They should be able to identify .RTF, .TXT and .CSV file formats and be able to import or load these into their preferred appropriate software package. They may need to practise locating files from a variety of network drive locations as well.</p> <p>Explain file compression (zipping files)</p>	<p>Host system for e-mail messages, which could be internal to the centre or globally known hosts like:  <a href="http://www.hotmail.com">http://www.hotmail.com</a>  <a href="http://www.yahoo.com">http://www.yahoo.com</a></p> <p><b>Exercise 3</b></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• set up e-mail addresses</li> <li>• prepare a list of e-mail addresses so that students can send files to the teacher and/or other students</li> <li>• prepare files (with a variety of different file types) to be used as practice attachments</li> <li>• provide instructions showing what the students have to do.</li> </ul>
1.4	Receive a file	<p>Receive a file from another ICT user electronically and save the file attachment in a form that can be used by an applications package (including removing file compression (unzipping)).</p> <p>Explain viruses that could be embedded within file attachments.</p> <p>Explain mailbox storage limits and good housekeeping when managing received e-mails.</p>	<p>Host system for e-mail messages, which could be internal to the centre or globally known hosts like:  <a href="http://www.hotmail.com">http://www.hotmail.com</a>  <a href="http://www.yahoo.com">http://www.yahoo.com</a></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• set up e-mail addresses</li> <li>• prepare a list of e-mail addresses so that students can send files to the teacher and/or other students</li> <li>• prepare files including compressed files, (with a variety of different file types) to be used as practice attachments</li> <li>• provide instructions showing what the students have to do.</li> </ul>

Section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
2.1	Locate information from a website	<p>Log in procedures and introduction to websites. Learn to use the features of a web browser. Discuss the validity of the information located on the Internet.</p> <p>This is also a good time to discuss the implications of security on the Internet, including giving personal details (such as bank details).</p> <p>Discuss viruses, pop-ups, data miners, Trojans etc. that can be downloaded with internet use. Discuss prevention of these using firewalls, anti-virus scanners etc.</p> <p>Discuss home pages and locating information using the URL entered into the address bar.</p> <p>Identify the difference between the internet and intranet.</p>	<p>Live internet connection. Web browser software. A list of suitable websites like:</p> <p><a href="http://www.hothouse-design.co.uk">http://www.hothouse-design.co.uk</a>  <a href="http://www.dygitell.com">http://www.dygitell.com</a></p> <p><b>Exercise 4</b></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• check connection to Hothouse-design website and location of files for download by candidates</li> <li>• know what is on any specified website</li> <li>• be aware of any Internet search results set for the students</li> <li>• provide instructions showing what the students have to do.</li> </ul>
2.2	Search for information using the internet	<p>Find specified information using a search engine. Use a simple search.</p> <p>Use a refined (advanced search) using both the advanced search features of search engines and using Boolean notation for AND, OR and NOT searches.</p> <p>Recognise the different methods that search engines employ to find search results.</p>	<p>Live internet connection. Web browser software. A variety of different online search engines like:</p> <p><a href="http://www.google.com">http://www.google.com</a>  <a href="http://www.yahoo.com">http://www.yahoo.com</a>  <a href="http://www.ask.co.uk">http://www.ask.co.uk</a>  <a href="http://www.dogpile.com">http://www.dogpile.com</a>  <a href="http://www.altavista.com">http://www.altavista.com</a></p> <p>Other websites like:</p> <p><a href="http://www.hothouse-design.co.uk">http://www.hothouse-design.co.uk</a></p> <p><b>Exercise 5</b></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• check internet connection</li> <li>• check connection to and a variety of search engines and location of files that could be download by candidates</li> <li>• be aware of any Internet search results set for the students</li> <li>• provide instructions showing what the students have to do.</li> </ul>

Section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
2.3	Download information from the internet	<p>Download and save specified information in a form that can be used by an applications package (including removing file compression (unzipping)).</p> <p>Explain viruses that could be embedded within downloaded files.</p> <p>Explain system storage limits and good housekeeping when managing received files.</p>	<p>Live internet connection.</p> <p>Web browser software.</p> <p>A variety of different online search engines like:</p> <p><a href="http://www.google.com">http://www.google.com</a></p> <p><a href="http://www.yahoo.com">http://www.yahoo.com</a></p> <p><a href="http://www.ask.co.uk">http://www.ask.co.uk</a></p> <p><a href="http://www.dogpile.com">http://www.dogpile.com</a></p> <p><a href="http://www.altavista.com">http://www.altavista.com</a></p> <p>Other websites like:</p> <p><a href="http://www.hothouse-design.co.uk">http://www.hothouse-design.co.uk</a></p> <p><a href="http://www.dygitell.com">http://www.dygitell.com</a></p>	<p>Tutor preparation required:</p> <ul style="list-style-type: none"> <li>• check internet connection</li> <li>• check connection to and a variety of search engines and location of files that could be download by candidates</li> <li>• ensure firewall and anti-virus software is functioning with the latest updates.</li> <li>• provide instructions showing what the students have to do.</li> </ul>

## **Unit 1 Exercises**

### **EXERCISE 1**

Discuss the language of electronic communication and the concepts of the Internet and e-mail. Examine prepared e-mails sent to the students (waiting in their Inbox). Prepared e-mails should be in a variety of styles – including written prose and note format. Discuss sending e-mails to multiple users, speed of access and cost comparisons with other forms of global communications. Read the e-mail, learn how to identify the sender and any attachments.

Practice moving file attachments from within the e-mail to disc storage for later use.

### **EXERCISE 2**

Prepare the following as a text document and copy this into each student's user area.

Your company carries out business with companies in a number of other countries. In order that your communication is carried out at the correct time of day in that country, it is advisable to know the time difference for such cities.

This table shows the time difference between London and the countries/cities shown:

COUNTRY	CITY	TIME
Australia	Sydney	+ 10
USA	New York	- 5
Japan	Tokyo	+ 9
Brazil	Rio de Janeiro	- 3
Portugal	Lisbon	+ 1
Pakistan	Islamabad	+ 5

Look up and complete the table for the difference between London and your (nearest) city.

**Extract this information and send it to your tutor. The tutor's e-mail address must be available.**

### EXERCISE 3

Using the file from Exercise 2, reply to your tutor that you have got the information about time differences and will be sending it as an attachment with your e-mail.

Send the message to your tutor, making sure that you attach a copy of the document with the message.

### EXERCISE 4

You work for Global Enterprises and are considering using Hothouse Design to produce some graphic design work. Enter the Hothouse website using the URL which is [www.hothouse-design.co.uk](http://www.hothouse-design.co.uk) and find information about Graphic Design. Copy this information and send this to your tutor. When the exercise has been completed a discussion about methods of solving this problem should prove useful. It is likely candidates will either Copy and Paste into the e-mail editor, or save the information as a file attachment. The merits of both systems should be discussed. This would also give a good lead in to discussion of data protection and copyright, both in general terms and relating to the moral and legal issues specific to your country/region.

### EXERCISE 5

You work for Global Enterprises and need to find information on car hire. Search the Internet and find details of car hire companies on three different continents. Send brief details of your findings to your tutor, indicating with each piece of information the URL of the site where you found the information.

This exercise would be better adapted to information that is of interest to the students. An extension of this work would be for the students to extract text, graphics, tables, charts etc from websites, but the source sites will need careful research and the search criteria will need careful checking.

This exercise could be given in a controlled situation with each student being asked to search for the same information using three different search engines. When the task has been completed discussion on the different data matches from the different search engines could take place.

## EXERCISE 6

1	You should check your e-mail for any new messages. Read the message with the subject: <b>legislation</b>
2	Save the file attached to this message for later use.
3	Follow instructions in the message to locate further information.
4	Download and save the information for use later in the module.

Tutor preparation:

The message will have the subject set as **Legislation**

The message will say that there is a file attached and identify it as **DOCPROD.TXT**

The message will direct the candidate to the hothouse design website at [www.hothouse-design.co.uk](http://www.hothouse-design.co.uk) and specify a file to be found using search facilities. This will be a file used in another section of the core assignment, such as **VIOLATE.CSV** data file for use in the data handling part of the assignment. Candidates must be able to locate, access and save these files to be able to proceed with the assessment.

The candidate will complete the communication skills exercise by sending a reply, or forwarding the message to a specified recipient. The recipient will provide an auto response that the candidate can print as confirmation of sending the e-mail. Later the candidate will send a copy of completed document as an attached file to a message confirming completion of the last part of the assignment (the integrated document).

Candidates should provide evidence of messages received by printing e-mails with header or transaction details.